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HUANG, WEN WU	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/771,938	RONG ET AL.	
	Examiner	Art Unit	
	WEN W. HUANG	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 12/07/07.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-47 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-47 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claims 1-47 are pending.

Claim Objections

Claims 14, 27 and 31 are objected to because of the following informalities:

Claims 14, 27 and 31 recite a computer program.

The Examiner submits that examples of acceptable languages for computer-processing related claims are "computer readable medium encoded with computer program". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 2, 4, 6, 7, 9, 10, 14, 15, 17, 19, 20, 22, 23, 27, 28, 30, 36, 37, 41, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaal (US Pub No. 2004/0203475 A1) in view of Miyoshi et al. (US Pub No. US 2003/0022629 A1; hereinafter "Miyoshi)

Regarding **claim 1**, Gaal teaches a method (see Gaal, para. [0005]), comprising:

receiving a reported code from a mobile station (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3), the code being indicative of a quantized result of a measurement result value (see Gaal, para. [0027], table 1) obtained from a forward channel (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal);

converting the reported code to a number (see Gaal, para. [0028], table 2, converting mapped full C/I ratio bits into quantized full C/I ratio values);

comparing a probability value assigned to the number to a threshold (see Gaal, para. [0043], lines 8-12, a probability vector assigned to the N possible quantized full C/I ratio values; comparing the probability value assigned to the reported quantized C/I ratio value to a probability factor δ, such as 85%); and

if the comparison indicates that the number may not accurately reflect the measurement result value (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the forward link), adjusting the number using an adjustment factor (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value).

Gaal is silent to teaching that comparing the number to a threshold. However, the claimed limitation is well known evidenced by Miyoshi.

In the same field of endeavor, Miyoshi teaches a method comprising

comparing the number to a threshold (see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]); and

adjusting the number using an adjustment factor (see Miyoshi, fig. 4, para. [0068]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

Regarding **claim 2**, the combination of Gaal and Miyoshi also teaches a method as in claim 1, where the adjustment factor is a constant (see Miyoshi, fig. 4, 1dB).

Regarding **claim 4**, the combination of Gaal and Miyoshi also teaches a method as in claim 1,further comprising receiving the adjustment factor from the mobile station (see Gaal, fig. 2; differential value 208; para. [0025], lines15-16; fig. 3 and para. [0032]).

Regarding **claim 6**, the combination of Gaal and Miyoshi also teaches a method as in claim 1, where the measurement result value is quantized in accordance with an N level quantization to obtain the code, and N is equal to 16 (see Gaal, para. [0027], table 1).

Regarding **claim 7**, the combination of Gaal and Miyoshi also teaches a method as in claim 1, where the threshold is equal to -16.25 dB (see Gaal, para. [0035], table 3, first row of table 3 representing "0000" corresponding to –16.25 dB in table 2).

Regarding **claim 9**, the combination of Gaal and Miyoshi also teaches a method as in claim 1, where the measurement result value indicates a measurement of a pilot channel (see Gaal, para. [0034], lines 11-15).

Regarding **claim 10**, the combination of Gaal and Miyoshi also teaches a method as in claim 9, where the measurement of a pilot channel indicates a value for a signal to noise ratio of a forward pilot channel (see Gaal, para. [0034], lines 11-15).

Regarding **claim 14**, Gaal teaches a wireless communication system, comprising:

a mobile station (see Gaal, fig. 1, MS 104) comprising circuitry and a computer program controlling operation of the circuitry to make a measurement from a forward channel to obtain a measurement result value (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal), to quantize the measurement result value in accordance with an N level quantization to obtain a code (see Gaal, para. [0027], table 1), and to report the code on a reverse channel (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3); and

a base station (see Gaal, fig. 1, BS 102) comprising circuitry and a computer program controlling operation of the circuitry to convert the code to a number (see Gaal, para. [0028], table 2, converting mapped full C/I ratio bits into quantized full C/I ratio values), to compare a probability value assigned to the number to a threshold (see Gaal, para. [0043], lines 8-12, a probability vector assigned to the N possible quantized full C/I ratio values; comparing the probability value assigned to the reported quantized C/I ratio value to a probability factor δ, such as 85%) and, if the comparison indicates that the number may not accurately reflect the measurement result value (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the forward link), to adjust the number using an adjustment factor (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value).

Gaal is silent to teaching that comprising a base station to compare the number to a threshold. However, the claimed limitation is well known evidenced by Miyoshi.

In the same field of endeavor, Miyoshi teaches a system comprising a base station to compare the number to a threshold (see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]); and

to adjust the number using an adjustment factor (see Miyoshi, fig. 4, para. [0068]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

Regarding **claims 15, 17, 19, 20, 22 and 23**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 2, 4, 6, 7, 9 and 10, respectively.

Regarding **claim 27**, Gaal teaches a network infrastructure component of a wireless communication system (see Gaal, fig. 1, BS 102) comprising circuitry and a computer program controlling operation of the circuitry to receive a code from a mobile station (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3), the code being indicative of a quantized result (see Gaal, para. [0027], table 1) of a measurement result value obtained from a forward channel (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal), to convert the code to a number (see Gaal, para. [0028], table 2, converting mapped full C/I ratio bits into quantized full C/I ratio values), to compare a probability value assigned to the number to a threshold (see Gaal, para. [0043], lines 8-12, a probability vector assigned to the N possible quantized full C/I ratio values; comparing the probability value assigned to the reported quantized C/I ratio value to a probability factor δ, such as 85%) and, if the comparison indicates that the number may

not accurately reflect the measurement result value (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the forward link), to adjust the number using an adjustment factor (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value).

Gaal is silent to teaching the system configured to compare the number to a threshold. However, the claimed limitation is well known evidenced by Miyoshi.

In the same field of endeavor, Miyoshi teaches a system configured to compare the number to a threshold (see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]); and

to adjust the number using an adjustment factor (see Miyoshi, fig. 4, para. [0068]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

Regarding **claims 28 and 30**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 2 and 4, respectively.

Regarding **claim 36**, Gaal teaches a wireless network apparatus (see Gaal, fig. 1, BS 102) comprising means for receiving a code from a mobile station (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3), the code being indicative of a quantized result (see Gaal, para. [0027], table 1)of a measurement result value obtained from a forward channel (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal), and for converting the code to a number (see Gaal, para. [0028], table 2, converting mapped full C/I ratio bits into quantized full C/I ratio values), comparing a probability value assigned to the number to a threshold (see Gaal, para. [0043], lines 8-12, a probability vector assigned to the N possible quantized full C/I ratio values; comparing the probability value assigned to the reported quantized C/I ratio value to a probability factor δ, such as 85%); and, if the comparison indicates that the number may not accurately reflect the measurement result value (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the forward link), for adjusting the number using an adjustment factor (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value).

Gaal is silent to teaching the system comprising means for comparing the number to a threshold. However, the claimed limitation is well known evidenced by Miyoshi.

In the same field of endeavor, Miyoshi teaches a system comprising means for comparing the number to a threshold (see Miyoshi, para. [0011], when a difference

arises between the measured channel quality and the current actual channel quality; see para. [0069]); and

means for adjusting the number using an adjustment factor (see Miyoshi, fig. 4, para. [0068]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

Regarding **claim 37**, the dependent claim is interpreted and rejected for the same reasons as set forth above in claim 2.

Regarding **claim 41**, Gaal teaches a method (see Gaal, fig. 1, BS 102) comprising

making a measurement from a forward channel to obtain a measurement result value (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal);

quantizing the measurement result value in accordance with an N level quantization to obtain a code (see Gaal, para. [0027], table 1);

reporting the code on a reverse channel (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3),

determining whether the reported code accurately reflects the actual measurement result values (see Gaal, para. [0043], lines 8-12, a probability vector assigned to the N possible quantized full C/I ratio values; comparing the probability value assigned to the reported quantized C/I ratio value to a probability factor δ, such as 85%); and

adjusting the quantized code represented by the reported code (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value) when ten number may not accurately reflect the measurement result value (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the forward link), for adjusting the number using an adjustment factor (see Gaal, para. [0029], lines 1-3 and para. [0047], lines 4-9, when reliability of the full C/I is too low, the estimated C/I value is adjusted using the differential value).

Gaal is silent to teaching the method comprising reporting an adjustment factor which is used to adjust the quantized code represented by the reported code when the number may not accurately reflect the measurement result value. However, the claimed limitation is well known evidenced by Miyoshi.

In the same field of endeavor, Miyoshi teaches a method comprising reporting an adjustment factor which is used to adjust the quantized code represented by the reported code (see Miyoshi, fig. 3 and 4, para. [0067], X[dB], Y[dB] and Z[dB]; variation amounts) when the number may not accurately reflect the measurement result value

(see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

Regarding **claims 45 and 46**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 9 and 10, respectively.

2. Claims 5, 8, 18, 21, 31, 32, 33, 38, 39, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaal and Miyoshi as applied to claims 4, 17 and 41, respectively above, and further in view of Kim et al. (US Pub No. 2003/0137955 A1; hereinafter “Kim”)

Regarding **claim 5**, the combination of Gaal and Miyoshi teaches a method as in claim 4, where the adjustment factor is computed by the mobile station by (see Gaal, fig. 2; differential value 208; para. [0025], lines15-16; fig. 3 and para. [0032], +.5 or -.5 dB): during a period of time when the reported codes do not accurately reflect actual measurement result values (see Gaal, para. [0043], lines 7-15, a low probability values indicates the assigned C/I ratio value may not represent the actual C/I ratio value of the

forward link), determining a difference between individual ones of actual measurement result values and a threshold measurement result value (see Gaal, para. [0043], lines 7-16).

Gaal is silent to teaching that where the adjustment factor is computed by the mobile station by:

averaging the difference values; and reporting the average of the difference values as the adjustment factor to the base station. However, the claimed limitation is well known in the art as evidenced by Kim.

In the same field of endeavor, Kim teaches a method where the adjustment factor is computed by the mobile station by:

averaging the difference values (see Kim, fig. 4, component 480; para. [0040], lines 8-12; recursive average); and reporting the average of the difference values as the adjustment factor to the base station (see Kim, fig. 7, component 860; para. [0049], lines 3-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Kim in order to estimate a forward channel quality without a reduction in efficiency of a reverse link in the communication system (see Kim, para. [0009]).

Regarding **claim 8**, the combination of Gaal, Miyoshi and Kim also teaches a method as in claim 5, where the threshold measurement result value is equal to -15.5 dB (see Gaal, para. [0027], "0000").

Regarding **claims 18 and 21**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 5 and 8, respectively.

Regarding **claims 42 and 43**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 5 and 8, respectively.

Regarding **claim 31**, Gaal teaches a mobile station component of a wireless communication system (see Gaal, fig. 1, MS104), comprising circuitry and a computer program controlling operation of the circuitry

to make a measurement from a forward channel to obtain a measurement result value (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal),

to quantize the measurement result value in accordance with an N level quantization to obtain a code (see Gaal, para. [0027], table 1),

to report the code on a reverse channel to a wireless communication system infrastructure component (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3).

Gaal is silent to teaching that comprising circuitry and a computer program controlling operation of the circuitry

to determine a value of an adjustment factor for use by the infrastructure component when processing the code by being responsive to a period of time when the obtained codes do not accurately reflect actual measurement result values to determine

a difference between individual ones of actual measurement result values and a threshold measurement result value;

to average the difference values and to report the average of the difference values as the adjustment factor to the infrastructure component. However, the claimed limitation is well known in the art as evidenced by Miyoshi and Kim.

In the same field of endeavor, Miyoshi teaches that comprising circuitry and a computer program controlling operation of the circuitry

to determine a value of an adjustment factor for use by the infrastructure component when processing the code by being responsive to a period of time (see Miyoshi, fig. 3 and 4, para. [0067], X[dB], Y[dB] and Z[dB]; variation amounts) when the obtained codes do not accurately reflect actual measurement result values to determine a difference between individual ones of actual measurement result values and a threshold measurement result value (see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

The combination of Gaal and Miyoshi is silent to teaching that comprising circuitry and a computer program controlling operation of the circuitry

to average the difference values and to report the average of the difference values as the adjustment factor to the infrastructure component. However, the claimed limitation is well known in the art as evidenced by Kim.

In the same field of endeavor, Kim teaches that comprising circuitry and a computer program controlling operation of the circuitry

to average the difference values (see Kim, fig. 4, component 480; para. [0040], lines 8-12; recursive average) and to report the average of the difference values as the adjustment factor to the infrastructure component (see Kim, fig. 7, component 860; para. [0049], lines 3-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Miyoshi with the teaching of Kim in order to estimate a forward channel quality without a reduction in efficiency of a reverse link in the communication system (see Kim, para. [0009]).

Regarding **claim 32**, the combination of Gaal, Miyoshi and Kim also teaches a mobile station component as in claim 31, where N is equal to 16 and where the threshold measurement result value is equal to -15.5 dB (see Gaal, para. [0027], table 1, "0000").

Regarding **claim 33**, the combination of Gaal, Miyoshi and Kim also teaches a mobile station component as in claim 31, where the measurement is made from a pilot

channel to determine a value for a signal to noise ration of a forward pilot channel (see Gaal, para. [0034], lines 11-15).

Regarding **claim 38**, Gaal teaches a wireless network apparatus (see Gaal, fig. 1, MS 104) comprising

means for making a measurement from a forward channel to obtain a measurement result value (see Gaal, para. [0023], lines 11-17, C/I ratio of forward pilot signal),

means for quantizing the measurement result value in accordance with an N level quantization to obtain a code (see Gaal, para. [0027], table 1),

means for reporting the code on a reverse channel to a wireless communication system infrastructure component (see Gaal, para. [0023], lines 1-5 and para. [0027], lines 1-3).

Gaal is silent to teaching that comprising

means for determining a value of an adjustment factor for use by the infrastructure component when processing the code, said value determining means being responsive to an occurrence of a period of time when the obtained codes do not accurately reflect actual measurement result values for determining a difference between individual ones of actual measurement result values and a threshold measurement result value; and

means for averaging the difference values and for reporting the average of the difference values as the adjustment factor to the infrastructure component. However, the claimed limitation is well known in the art as evidenced by Miyoshi and Kim.

In the same field of endeavor, Miyoshi teaches that comprising

means for determining a value of an adjustment factor for use by the infrastructure component when processing the code, said value determining means being responsive to an occurrence of a period of time (see Miyoshi, fig. 3 and 4, para. [0067], X[dB], Y[dB] and Z[dB]; variation amounts) when the obtained codes do not accurately reflect actual measurement result values for determining a difference between individual ones of actual measurement result values and a threshold measurement result value (see Miyoshi, para. [0011], when a difference arises between the measured channel quality and the current actual channel quality; see para. [0069]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal with the teaching of Miyoshi in order to improve data transmission efficiency and mitigate problems caused when a difference arises between a measured channel quality and a current actual channel quality (see Miyoshi, para. [0007] and [0008]).

The combination of Gaal and Miyoshi is silent to teaching that comprising

means for averaging the difference values and for reporting the average of the difference values as the adjustment factor to the infrastructure component. However, the claimed limitation is well known in the art as evidenced by Kim.

In the same field of endeavor, Kim teaches that comprising

means for averaging the difference values (see Kim, fig. 4, component 480; para. [0040], lines 8-12; recursive average) and for reporting the average of the difference values as the adjustment factor to the infrastructure component (see Kim, fig. 7, component 860; para. [0049], lines 3-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Miyoshi with the teaching of Kim in order to estimate a forward channel quality without a reduction in efficiency of a reverse link in the communication system (see Kim, para. [0009]).

Regarding **claim 39**, the dependent claim is interpreted and rejected for the same reason as set forth above in claim 33.

3. Claims 11, 13, 24, 26, 44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaal and Miyoshi as applied to claims 4, 17 and 41, respectively above, and further in view of Holtzman (US Pub No. 2004/0057394 A1; hereinafter "Holtzman").

Regarding **claim 11**, the combination of Gaal and Miyoshi teaches a method as in claim 4.

The combination of Gaal and Miyoshi is silent to teaching that where receiving the value of the adjustment factor occurs at intervals that are longer than intervals

between the mobile station making a full channel quality indicator report. However, the claimed limitation is well known in the art as evidenced by Holtzman.

In the same field of endeavor, Holtzman teaches a method where receiving the value of the adjustment factor occurs at intervals that are longer than intervals between the mobile station making a full channel quality indicator report (see Holtzman, para. [0043], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Miyoshi with the teaching of Holtzman in order to verify the accuracy and reliability of the quality feedback information (see Holtzman, para. [0005], lines 10-12).

Regarding **claim 13**, the combination of Gaal and Miyoshi teaches a method as in claim 4.

The combination of Gaal and Miyoshi is silent to teaching that further comprising signaling to the mobile station the intervals at which the mobile station is to report the value of the adjustment factor. However, the claimed limitation is well known in the art as evidenced by Holtzman.

In the same field of endeavor, Holtzman teaches a method further comprising signaling to the mobile station the intervals at which the mobile station is to report the value of the adjustment factor (see Holtzman, para. [0043], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Miyoshi with the

teaching of Holtzman in order to verify the accuracy and reliability of the quality feedback information (see Holtzman, para. [0005], lines 10-12).

Regarding **claims 24 and 26**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 11 and 13, respectively.

Regarding **claims 44 and 47**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 11 and 13, respectively.

4. Claims 12, 25, 34, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaal, Miyoshi and Kim as applied to claims 5, 18, 31 and 38 above, and further in view of Holtzman.

Regarding **claim 12**, the combination of Gaal, Miyoshi and Kim teaches a method as in claim 5.

The combination of Gaal, Miyoshi and Kim is silent to teaching that where reporting the value of the adjustment factor occurs at intervals that are longer than intervals between the mobile station making a full channel quality indicator report. However, the claimed limitation is well known in the art as evidenced by Holtzman.

In the same field of endeavor, Holtzman teaches a method where reporting the value of the adjustment factor occurs at intervals that are longer than intervals between

the mobile station making a full channel quality indicator report (see Holtzman, para. [0043], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal, Miyoshi and Kim with the teaching of Holtzman in order to verify the accuracy and reliability of the quality feedback information (see Holtzman, para. [0005], lines 10-12).

Regarding **claim 25**, the dependent claim is interpreted and rejected for the same reason as set forth above in claim 12.

Regarding **claims 34 and 35,** the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 11 and 13, respectively.

Regarding **claim 40**, the combination of Gaal and Kim teaches a wireless network apparatus as in claim 38.

The combination of Gaal and Kim is silent to teaching that where said value determining means reports the value of the adjustment factor at intervals that are at least one of: longer than intervals between making a full channel quality indicator (CQI) report; and specified to the mobile station component in signaling received from a base station. However, the claimed limitation is well known in the art as evidenced by Holtzman.

In the same field of endeavor, Holtzman teaches a wireless network apparatus where said value determining means reports the value of the adjustment factor at intervals that are at least one of: longer than intervals between making a full channel quality indicator (CQI) report; and specified to the mobile station component in signaling received from a base station (see Holtzman, para. [0043], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Kim with the teaching of Holtzman in order to verify the accuracy and reliability of the quality feedback information (see Holtzman, para. [0005], lines 10-12).

5. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaal and Miyoshi as applied to claims 1 and 14 above, and further in view of Arima et al. (US. Pub No. 2006/0165091 A1; hereinafter "Arima").

Regarding **claim 3**, the combination of Gaal and Miyoshi teaches a method as in claim 1.

The combination of Gaal and Miyoshi is silent to teaching that where the adjustment factor has a value that is a function of a distance between a base station and the mobile station. However, the claimed limitation is well known in the art as evidenced by Arima.

In the same field of endeavor, Arima teaches that where the adjustment factor has a value that is a function of a distance between a base station and the mobile

station (see Arima, para. [0049]; because the packet discarding rate is a function of a distant between the MS and the BS; therefore, the corrected offset value is a function of a distant between the MS and the BS).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Gaal and Miyoshi with the teaching of Arima in order to increase the reliability of information between the base station and mobile station (see Arima, para. [0006]).

Regarding **claim 16**, the dependent claim is interpreted and rejected for the same reason as set forth above in claim 3.

Response to Arguments

Applicant's arguments with respect to claims 1, 14, 27, 36, 5, 31 an d38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN W. HUANG whose telephone number is (571)272-7852. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

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/W. W. H./
Examiner, Art Unit 2618

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618